



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,452	06/12/2001	Dimitrious Papadimitriou	50001.2059	3538

27045 7590 02/09/2004

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER

PEACHES, RANDY

ART UNIT	PAPER NUMBER
----------	--------------

2686

9

DATE MAILED: 02/09/2004

May 10, 2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/879,452	PAPADIMITRIOU ET AL.	
	Examiner	Art Unit	
	Randy Peaches	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7 and 8</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1, 3-4*** are rejected under 35 U.S.C. 102(b) as being anticipated by Onoe et al (U.S. Patent Number 5,361,396).

Regarding ***claim 1***, Onoe et al discloses a mobile communication network, which reads on claimed "wireless network", providing global paging of mobile stations (115) service by the network comprising:

- a plurality of mobile control centers (101), which reads on claimed "pool of mobile switching centers", for servicing mobile stations (115) within a specified service area of said mobile communication system. See FIGURE 2, columns 4 and 6 lines 11-18 lines 45-47 respectfully; and
- a Home Memory Station (HMS, 102) or Home Location Register (HLR, 102), which reads on claimed "radio configuration database", defining a plurality of groups (A_i , B_i), which reads on claimed "global paging areas", within said specified service area. See column 2 and 3 lines 3-46 lines 17-34 respectfully;
- wherein the said HMS (102) is accessible by any said MCC (101) in said pool to allow paging, as referenced in column 6 lines 25-47, of a mobile station (115)

roaming within said specified service area according to one or more said groups (Ai, Bi).

Regarding **claim 3** as claimed in **claim 1**, Onoe et al discloses as said mobile communication network wherein said HMS (102) includes a first field for storing the zone's location code, as represented in FIGURE 5 and taught in column 4 lines 11-30, which reads on claimed "cell identity of cells" within said specified service area.

Regarding **claim 4** as claimed in **claim 3**, Onoe et al discloses as said mobile communication network wherein said HMS (102) includes a second field for storing the said location registration area (A₁₋₃, B₁₋₃, C₁₋₃) or group within said specified service area. See FIGURE 5 column 4 lines 11-30.

2. **Claims 7-10** are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al (U.S. Patent Number 6,343,216).

Regarding **claim 7**, Kim et al discloses a method of paging a mobile station within a Mobile Communication System, which reads on claimed "wireless network" comprising a plurality, as taught in column 3 lines 25-30, of Mobile Switching Centers (MSC 70a, 70b), the method comprising the steps of:

- transmitting a paging request for a mobile station to the said mobile communication network. See column 6 lines 30-33;

Art Unit: 2686

- the said MSC (70a, 70b) in which the sending of a paging request to the corresponding base station of the paged said mobile station. See column 6 line 48-40 lines 53-56 respectively;
- responding to the paging request if an answer is received from the mobile station. See column 8 lines 15-35;
- broad paging, which reads on claimed "globally paging", the said mobile station if no answer is receive from the mobile station. See column 7 lines 24-27.

Regarding **claim 8**, as claimed in **claim 7**, wherein the said broad paging step further comprises the step of accessing the Home Location Register (HLR, 80) to obtain the most recent information for the said mobile station. See column 3 lines 34-41.

Regarding **claim 9**, where the method, as claimed in **claim 8**, further comprises the steps of:

- finding the paging area (PA_1 , PA_2), which reads on claimed "location area", in which the said mobile station was most recently present;
- determining which said paging area (PA_1 , PA_2) the said MSC (70a, 70b) belongs; and
- paging the said mobile station within said broad paging area. See FIGURE 11, column 7 lines 18-27.

Art Unit: 2686

Regarding **claim 10**, as claimed in **claim 9**, wherein the said paging step is performed by the said mobile station in all paging areas within said broad paging area. See column 7 lines 25-27.

3. **Claims 13-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Tiedemann, Jr. (U.S. Patent Number 5,289,527).

Regarding **claim 13**, Tiedemann, Jr. discloses a cellular communication system, which reads on claimed "wireless network", containing a database from the Mobile Telephone Switch Office (MTSO, 14) area coordinate, a method of globally paging a mobile station within the paging zone, which reads on claimed "service area", of the said cellular communication system comprising the step of:

- populating a said database with latitude/longitude and float zone circular boundary, which reads on claimed "center and radius coordinates of geographic areas", as taught in column 5 lines 45-47, of the said cellular communication system's paging region. See FIGURE 1 column 9 and 10 lines 25-68 lines 1-32, respectively.
- paging a mobile station within one or more cells of the said cellular communication system's said paging region using the said coordinates from a database. See FIGURE 1.

Art Unit: 2686

Regarding **claim 14**, as claimed in **claim 13**, further comprising a step of increasing the radius coordinate to define a larger geographic paging zone known as a floating zone if paging is unsuccessful.

Regarding **claim 15**, as claimed in **claim 13**, wherein said geographic paging zone or floating zone corresponds to a predetermined distance, which reads on claimed "predetermined location area", of the said cellular communication systems paging region. See column 7 and 9 lines 34-48 lines 25-29 respectively.

Regarding **claim 16**, as claimed in **claim 15**, wherein the paging step is performed by paging in a location area defined by a said latitude/longitude and float zone circular boundary contained in said database of said MTSO (14). See column 7 lines 34-63.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Onoe et al (U.S. Patent Number 5,361,396) in view of Kim et al (U.S. Patent Number 6,343,216).

Art Unit: 2686

Regarding **claim 2**, as claimed in **claim 1**, Onoe et al discloses a mobile communication network, which reads on claimed "wireless network", providing global paging of mobile stations (115) serviced by the network comprising:

- a plurality of mobile control centers (101), which reads on claimed "pool of mobile switching centers", for servicing mobile stations (115) within a specified service area of said mobile communication system. See FIGURE 2, columns 4 and 6 lines 11-18 lines 45-47 respectfully; and
- a Home Memory Station (HMS, 102) or Home Location Register (HLR, 102), which reads on claimed "radio configuration database", defining a plurality of groups (A_i , B_i), which reads on claimed "global paging areas", within said specified service area. See column 2 and 3 lines 3-46 lines 17-34 respectfully;
- wherein the said HMS (102) is accessible by any said MCC (101) in said pool to allow paging, as referenced in column 6 lines 25-47, of a mobile station (115) roaming within said specified service area according to one or more groups (A_i , B_i);

wherein said HMS (102) is structured in a hierarchy including zones (X,Y,Z), and location registration areas (A_{1-3} , B_{1-3} , C_{1-3}), which reads on claimed "location areas", for each said group (A_i , B_i) in a specified service area.

However, Onoe et al does not disclose where the said HMS (102) is structured in a said hierarchy further including a base station controller.

Kim et al teaches in column 3 lines 20-32 of a base station controller (BSC00, BSC01L 64b, BSC10 64c) as part of the said group (A_i , B_i) in a specified service area.

Art Unit: 2686

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the teachings Onoe et al (U.S. Patent Number 5,361,396) to include Kim et al (U.S. Patent Number 6,343,216) in order to ensure that hierarchal structure, which includes a said base station controller (BSC00, BSC01L 64b, BSC10 64c), to provides an efficient method of paging a mobile station within a specified service area.

5. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Onoe et al (U.S. Patent Number 5,361,396) in view of Ernam et al (U.S. Patent Number 6,148,201).

Regarding **claim 5**, as claimed in **claim 4**, Onoe et al discloses a mobile communication network, which reads on claimed "wireless network", providing global paging of mobile stations (115) serviced by the network comprising:

- a plurality of mobile control centers (101), which reads on claimed "pool of mobile switching centers", for servicing mobile stations (115) within a specified service area of said mobile communication system. See FIGURE 2, columns 4 and 6 lines 11-18 lines 45-47 respectfully; and
- a Home Memory Station (HMS, 102) or Home Location Register (HLR, 102), which reads on claimed "radio configuration database", defining a plurality of location registration area (A₁₋₃, B₁₋₃, C₁₋₃), which reads on claimed "global paging

Art Unit: 2686

areas", within said specified service area. See column 2 and 3 lines 3-46 lines 17-34 respectfully;

- wherein the said HMS (102) is accessible by any said MCC (101) in said pool to allow paging, as referenced in column 6 lines 25-47, of a mobile station (115) roaming within said specified service area according to one or more said location registration areas (A_{1-3} , B_{1-3} , C_{1-3});

However, Onoe et al does not disclose a third field of the said HMS (102) storing the identity of a base station controller or radio network controller within said specified service area.

Ernam et al discloses in column 1, 4, and 9 lines 54-56 lines 32-37 lines 20-27 respectively, of a base station controller (BSC 110, 112, 114) being included in the network routing circuitry which stores the location/identity of the said BSC currently serving a mobile unit.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings Onoe et al (U.S. Patent Number 5,361,396) to include Ernam et al (U.S. Patent Number 6,148,201) in order to include a third field in the said HMS (102) that identifies the servicing said BSC (110, 112, 114) within a said specified service area.

Regarding **claim 6**, as the above combination of Onoe et al (U.S. Patent Number 5,361,396) and Ernam et al (U.S. Patent Number 6,148,201) are made, the combination according to **claim 5**, would result wherein any said Mobile Control Center (101) in said

Art Unit: 2686

plurality, which reads on claimed "pool", is capable of paging a mobile station within said specified service area by accessing a said HMS (102) and determining the zone's location code, which reads on claimed "cell identity", location registration area, and said BSC (Ernam et al, column 9 lines 20-27) identity of a mobile station roaming within said specified service area. See Onoe et al column 6 lines 18-47.

6. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (U.S. Patent Number 6,343,216) in view of Onoe et al (U.S. Patent Number 5,361,396), in further view of Ernam et al (U.S. Patent Number 6,148,201) and in further view of Hanson (U.S. Patent Number 6,035,203).

Regarding **claim 11**, as claimed in **claim 7**, Kim et al discloses a method wherein paging a mobile station within a Mobile Communication System, which reads on claimed "wireless network" comprising a plurality, as taught in column 3 lines 25-30, of Mobile Switching Centers (MSC 70a, 70b), the method comprising the steps of:

- transmitting a paging request for a mobile station to the said mobile communication network. See column 6 lines 30-33;
- the said MSC (70a, 70b) in which the sending of a paging request to the corresponding base station of the paged said mobile station. See column 6 line 48-40 lines 53-56 respectively;
- responding to the paging request if an answer is received from the mobile station. See column 8 lines 15-35;

Art Unit: 2686

- broad paging, which reads on claimed "globally paging", the said mobile station if no answer is receive from the mobile station. See column 7 lines 24-27.

However, Kim et al does not disclose further steps of accessing a database containing the identity of all cells, location areas, base station controllers/radio network controllers, and global paging areas of the service area and determining, from the information contained within the said database, where the mobile station was last roaming.

Onoe et al discloses a mobile communication network, which reads on claimed "wireless network", providing global paging of mobile stations (115) serviced by the network comprising:

- a plurality of mobile control centers (101), which reads on claimed "pool of mobile switching centers", for servicing mobile stations (115) within a specified service area of said mobile communication system. See FIGURE 2, columns 4 and 6 lines 11-18 lines 45-47 respectfully; and
- a Home Memory Station (HMS, 102) or Home Location Register (HLR, 102), which reads on claimed "radio configuration database", defining a first field for storing the zone's location code, as represented in FIGURE 5 and taught in column 4 lines 11-30, which reads on claimed "cell identity of cells" within said specified service area.
- wherein said HMS (102) includes a second field containing a plurality of location registration areas (A_{1-3} , B_{1-3} , C_{1-3}), which reads on claimed "global paging areas", within said specified service area. See column 2 and 3 lines 3-46 lines 17-34 respectfully;

Art Unit: 2686

- wherein the said HMS (102) is accessible by any said MCC (101) in said pool to allow paging, as referenced in column 6 lines 25-47, of a mobile station (115) roaming within said specified service area according to one or more said location registration areas (A₁₋₃, B₁₋₃, C₁₋₃);

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Kim et al (U.S. Patent Number 6,343,216) to include Onoe et al (U.S. Patent Number 5,361,396) in order to obtain an accessible database capable of storing the said zone's location code, said location registration areas (A₁₋₃, B₁₋₃, C₁₋₃), and global paging area of a said mobile station to optimize the probability of acceptable paging of a said mobile station in its last known location.

However, the combination of Kim et al and Onoe et al does not disclose a fourth field of the said HMS (102) storing the identity of the servicing base station controller or radio network controller within said specified service area.

Ernam et al discloses in column 1, 4, and 9 lines 54-56 lines 32-37 lines 20-27 respectively, of a base station controller (BSC 110, 112, 114) being included in the network routing circuitry which stores the location/identity of the said BSC currently serving a mobile unit.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings Kim et al (U.S. Patent Number 6,343,216) to include Onoe et al (U.S. Patent Number 5,361,396) and to further include Ernam et al (U.S. Patent Number 6,148,201) in order to include a fourth field in the said

Art Unit: 2686

HMS (102) that identifies the servicing said BSC (110, 112, 114) where the said MCC (101) is capable of said broad paging, which reads on claimed "globally paging", a said mobile station within a said specified service area by accessing the said HMS (102) and determining the zone's location code, said location registration areas (A₁₋₃, B₁₋₃, C₁₋₃), global paging area and said BSC of a mobile station roaming within said specified service area.

However, the combination of Kim et al (U.S. Patent Number 6,343,216), Onoe et al (U.S. Patent Number 5,361,396) and Ernam et al (U.S. Patent Number 6,148,201) fails to teach of globally paging a mobile station where the said mobile station was last known to be roaming.

Hanson teaches in column 3 and 4 lines 24-35 lines 11-21 respectively, of a processing and database node (CDN, 30) that includes a data table that maintains a record of the most recent location, which reads on claimed "last known location", of a said mobile station.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Kim et al (U.S. Patent Number 6,343,216), Onoe et al (U.S. Patent Number 5,361,396) and Ernam et al (U.S. Patent Number 6,148,201) to included Hanson (U.S. Patent Number 6,035,203) in order to establish a database accessible by the said mobile communication network to determine the most recent location of the said mobile station to execute an effective paging process of the said mobile station in a defined paging area.

Art Unit: 2686

Regarding **claim 12**, as the above combination of Kim et al (U.S. Patent Number 6,343,216), Onoe et al (U.S. Patent Number 5,361,396), Ernam et al (U.S. Patent Number 6,148,201) and Hanson (U.S. Patent Number 6,035,203) are made, the combination according to **claim 11**, further comprises the step, as taught by Hanson in column 4 lines 23-45, of paging in said last said last known flood paging area, which reads on claimed "global paging area".

7. **Claims 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. (U.S. Patent Number 5,289,527) in view of Hanson (U.S. Patent Number 6,035,203).

Regarding **claim 17**, as claimed in **claim 16**, Tiedemann, Jr. discloses a method further comprising the steps of:

- increasing the said paging zone to define a zonal paging if paging within the said paging zone is unsuccessful. See columns 9 and 10 lines 25-35 lines 20-25 respectively.
- paging the said mobile within the circular paging area. See column 10 lines 20-25.

However, Tiedemann, Jr. fails to disclose defining a global paging area that includes all neighboring location area.

Hanson teaches in FIGURE 2, of defining a flood paging area, which reads on claimed "global paging area", the includes all neighboring cells and its neighbors.

Art Unit: 2686

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the teachings of Tiedemann, Jr. (U.S. Patent Number 5,289,527) to include Hanson (U.S. Patent Number 6,035,203) in order to provide a method of globally paging a said mobile station by defining a said flood paging area if an initial attempt of paging was unsuccessful.

Regarding **claim 18**, as the above combination of Tiedemann, Jr. (U.S. Patent Number 5,289,527) and Hanson (U.S. Patent Number 6,035,203) are made, the combination according to **claim 17**, further defines a method wherein the said increasing step of said paging zone is performed dynamically. See Tiedemann, Jr., columns 7 and 8 lines 56-67 lines 8-11 respectively.

8. **Claims 19-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. (U.S. Patent Number 5,289,527) in view of Hanson (U.S. Patent Number 6,035,203) and in further view of Meyer (U.S. Patent Number 6,175,735).

Regarding **claim 19**, as the above combination of Tiedemann, Jr. (U.S. Patent Number 5,289,527) in view of Hanson (U.S. Patent Number 6,035,203) are made, the combination according to **claim 17**, defines a method wherein the size of the said circular paging area is dynamically modified by the further steps of:

Art Unit: 2686

- as taught by Hanson in column 3 lines 24-36, storing "n" number of location area, in the call processing and database node (CDN, 30), where the mobile station was last located, which reads on claimed "roaming".
- storing time stamps indicating when the said mobile station entered "n" most recent area. See Hanson column 3 lines 23-36.

However, the combination of Tiedemann, Jr. (U.S. Patent Number 5,289,527) and Hanson (U.S. Patent Number 6,035,203) fails to teach of determining from the said time stamps if the mobile station is roaming fast or slow and increasing the radius of the paging area in proportion to the roaming speed of the said mobile station.

Meyer teaches in column 3 lines 40-63 of determining from the said time stamps if the mobile station is roaming fast or slow and increasing the radius from a micro-cell (Z_{11} , Z_{12} , Z_{13}) to macro cell (Z_{21} , Z_{22}) to the umbrella (Z_{31}). See FIGURE 1 column 4 lines 19-27.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Tiedemann, Jr. (U.S. Patent Number 5,289,527) and Hanson (U.S. Patent Number 6,035,203) to further include Meyer (U.S. Patent Number 6,175,735) in order to determine the paging area dependent upon the roaming speed of the said mobile station.

Regarding **claim 20**, as the above combination of Tiedemann, Jr. (U.S. Patent Number 5,289,527), Hanson (U.S. Patent Number 6,035,203) and Meyer (U.S. Patent Number 6,175,735) are made, the combination according to **claim 19**, defines a method wherein

Art Unit: 2686

the radius of the circular paging area is increased slightly when the said mobile station is roaming slow. See Meyer, FIGURE 1 column 3 lines 21-63.

Regarding **claim 21**, as the above combination of Tiedemann, Jr. (U.S. Patent Number 5,289,527), Hanson (U.S. Patent Number 6,035,203) and Meyer (U.S. Patent Number 6,175,735) are made, the combination according to **claim 19**, defines a method wherein the radius of the circular paging area is increased more when the said mobile station is roaming fast. See Meyer column 3 lines 23-63.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-5576.

Randy Peaches

Application/Control Number: 09/879,452

Page 18

Art Unit: 2686

January 28, 2004

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600